Family Health Partnership Mobile Outreach

McHenry County Board of Health Brief

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Family Health Partnership Clinic

I AM HUMAN

Acknowledgements

- City of Woodstock, IL

- Faith-Based Communities

- Family Health Partnership Clinic (Crystal Lake, IL)

- Old Fire House Assistance Center (Woodstock, IL)

- Pioneer Center for Human Services (McHenry County)

- Volunteers

Objectives

1. Describe the Family Health Partnership Clinic (FHPC) Mission and Vision for Mobile Outreach in McHenry County

2. List at least 5 services offered by FHPC Mobile Outreach to include scope of care

Objectives

3. Review top 10 health trends affecting sheltered and un-shelter people in the US, Illinois, and locally

4. Describe FHPC Mobile Outreach Patients including top diagnoses and/or reasons for seeking care at FHPC Mobile Outreach Clinics

5. Review progress to date using measures of success

Objective 1

Describe the Family Health Partnership Clinic (FHPC) Mission and Vision for Mobile Outreach in McHenry County

FHPC Mission Statement

The Family Health Partnership Clinic will improve the health status of the community and reduce the negative impact of poor access to care by providing a broad spectrum of services to the underserved with compassion and respect. We recognize that as a community, we are responsible for each other.

FHPC Outreach Purpose Statement (Vision)

- To provide healthcare and navigation services to the most hard to reach populations – homeless people, immigrants, and others not connected to services for whatever reason.

- This project utilizes two teams to provide primary care and/or screening services to people where they are located (where they live) so that transportation and other logistical barriers are reduced.

FHPC Outreach: Where?

Objective 2

- List at least 5 services offered by FHPC Mobile Outreach to include scope of care

Evidence-Based Care

- Provide health promotion and disease prevention services (e.g. BP screening, flu vaccine)
- Assess, diagnose, treat, and manage acute episodic and chronic illnesses
- Order, conduct, and interpret diagnostic and laboratory tests
- Prescribe pharmacological and non-pharmacologic therapies
- Teach and counsel patients about a variety of topics

(AANP, 2015)

The FHPC Van and Outreach Team 1

Evaluation, Care and Treatment
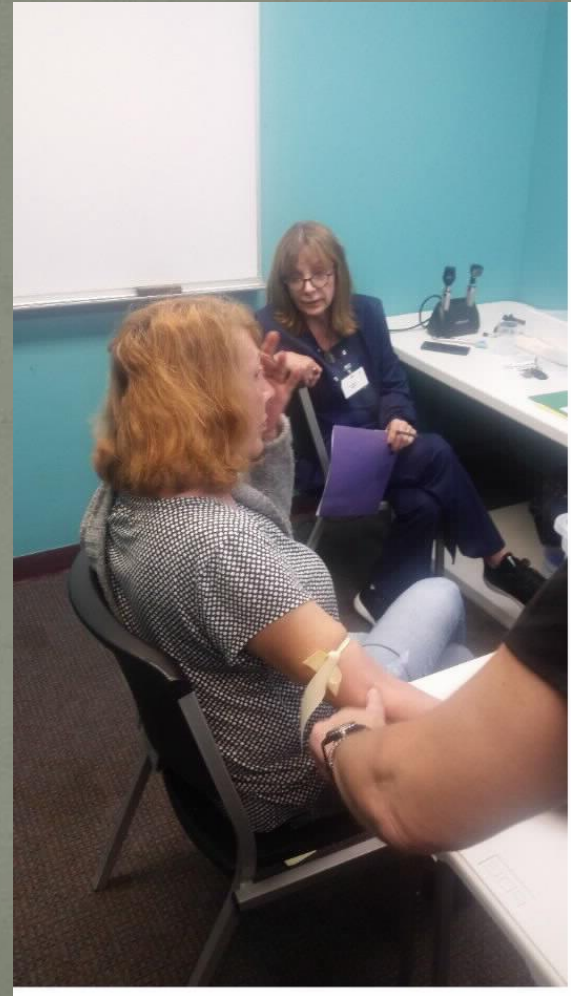
FHPC Outreach Team 2

Objective 3

- Review top 10 causes of death, health trends (i.e., chronic disease), and [re] emerging diseases affecting sheltered and un-sheltered people in the US, Illinois, and locally

10 Leading Causes of Death by Age Group, United States – 2015

Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
					Age Groups						
1	Congenital Anomalies 4,825	Unintentional Injury 1,235	Unintentional Injury 755	Unintentional Injury 763	Unintentional Injury 12,514	Unintentional Injury 19,795	Unintentional Injury 17,818	Malignant Neoplasms 43,054	Malignant Neoplasms 116,122	Heart Disease 507,138	Heart Disease 633,842
2	Short Gestation 4,084	Congenital Anomalies 435	Malignant Neoplasms 437	Malignant Neoplasms 428	Suicide 5,491	Suicide 6,947	Malignant Neoplasms 10,909	Heart Disease 34,248	Heart Disease 76,872	Malignant Neoplasms 419,389	Malignant Neoplasms 595,930
3	SIDS 1,568	Homicide 369	Congenital Anomalies 181	Suicide 409	Homicide 4,733	Homicide 4,863	Heart Disease 10,387	Unintentional Injury 21,499	Unintentional Injury 19,488	Chronic Low. Respiratory Disease 131,804	Chronic Low. Respiratory Disease 155,041
4	Maternal Pregnancy Comp. 1,522	Malignant Neoplasms 354	Homicide 140	Homicide 158	Malignant Neoplasms 1,469	Malignant Neoplasms 3,704	Suicide 6,936	Liver Disease 8,874	Chronic Low. Respiratory Disease 17,457	Cerebro-vascular 120,156	Unintentional Injury 146,571
5	Unintentional Injury 1,291	Heart Disease 147	Heart Disease 85	Congenital Anomalies 156	Heart Disease 997	Heart Disease 3,522	Homicide 2,895	Suicide 8,751	Diabetes Mellitus 14,166	Alzheimer's Disease 109,495	Cerebro-vascular 140,323
6	Placenta Cord. Membranes 910	Influenza & Pneumonia 88	Chronic Low. Respiratory Disease 80	Heart Disease 125	Congenital Anomalies 386	Liver Disease 844	Liver Disease 2,861	Diabetes Mellitus 6,212	Liver Disease 13,278	Diabetes Mellitus 56,142	Alzheimer's Disease 110,561
7	Bacterial Sepsis 599	Septicemia 54	Influenza & Pneumonia 44	Chronic Low Respiratory Disease 93	Chronic Low Respiratory Disease 202	Diabetes Mellitus 798	Diabetes Mellitus 1,986	Cerebro-vascular 5,307	Cerebro-vascular 12,116	Unintentional Injury 51,395	Diabetes Mellitus 79,535
8	Respiratory Distress 462	Perinatal Period 50	Cerebro-vascular 42	Cerebro-vascular 42	Diabetes Mellitus 196	Cerebro-vascular 567	Cerebro-vascular 1,788	Chronic Low. Respiratory Disease 4,345	Suicide 7,739	Influenza & Pneumonia 48,774	Influenza & Pneumonia 57,062
9	Circulatory System Disease 428	Cerebro-vascular 42	Benign Neoplasms 39	Influenza & Pneumonia 39	Influenza & Pneumonia 184	HIV 529	HIV 1,055	Septicemia 2,542	Septicemia 5,774	Nephritis 41,258	Nephritis 49,959
10	Neonatal Hemorrhage 406	Chronic Low Respiratory Disease 40	Septicemia 31	Two Tied: Benign Neo./Septicemia 33	Cerebro-vascular 166	Congenital Anomalies 443	Septicemia 829	Nephritis 2,124	Nephritis 5,452	Septicemia 30,817	Suicide 44,193

10 Leading Causes of Death US 2015

1. Heart Disease

2. Malignant Neoplasm

3. Chronic Lower Respiratory Disease

4. Unintentional Injury

5. Cerebrovascular

6. Alzheimer's Disease

7. Diabetes Mellitus

8. Influenza/Pneumonia

9. Nephritis

10. Suicide

Illinois Top 10 Leading Causes of Death 2014

1. Heart Disease
2. Cancer
3. Lung Disease
4. Stroke
5. Accidents
6. Alzheimer's Disease
7. Diabetes
8. Nephritis/Kidney Disease
9. Influenza/Pneumonia
10. Blood Poisoning

McHenry County Top 10

1. Cancer

2. Heart Disease

3. Chronic lower respiratory disease (COPD)

4. Accidents (unintentional injuries)

5. Stroke

6. Diabetes

7. Alzheimer's Disease

8. Nephritis

9. Pneumonia & influenza

10. Suicide

Health and Homelessness

Mental Health and Homeless People

- **It is estimated that 33 percent of the US homeless population suffer from severe mental illness**
    - Major Depression
    - Bipolar Depression
    - Schizophrenia
    - Anxiety
    - Obsessive Compulsive Disorder
    - Traumatic Brain Injury
    - Post Traumatic Stress Disorders
    - Substance Abuse Disorders

(Carroll, 2015)

HELP FIGHT HOBOPHOBIA

Mikey G Ottowa

Living with Chronic Disease
(and Symptom Groups)

- Arthritis
- Cancer survivorship
- Chronic pain
- Dementia
- Depression
- Type II Diabetes
- PTSD
- Schizophrenia
- Vision and Hearing loss

Living Unsheltered and Advanced Aging

- Older adults living on the street tend to exhibit mental and physical health issues that are more consistent with non-homeless people who are between **10 and 20** years and in some cases even **30 years older** than them.

- The general trend is to consider persons who are above 50 years as "older" (similar to the age 65 years) when considering a threshold for homelessness and aging.

(Cohen, Sokolovsky & Crane, 2001; Grenier, Barken, Sussman, Rothwell & Lavoie, 2016; NPR, 2013).

Emerging and Reemerging Transmissible Diseases in Homeless People (CDC, 2012; 2016)

- HIV
- Hepatitis B
- Hepatitis C
- Tuberculosis
- Scabies
- Lice
- Bartonella Quintana
- Airborne Diseases

Update (2016) added:

- Measles
- Meningococcal disease
- Shigellosis

Objective 4

- Describe FHPC Mobile Outreach Patients including top reasons for seeking care from FHPC Mobile Outreach Clinic Teams
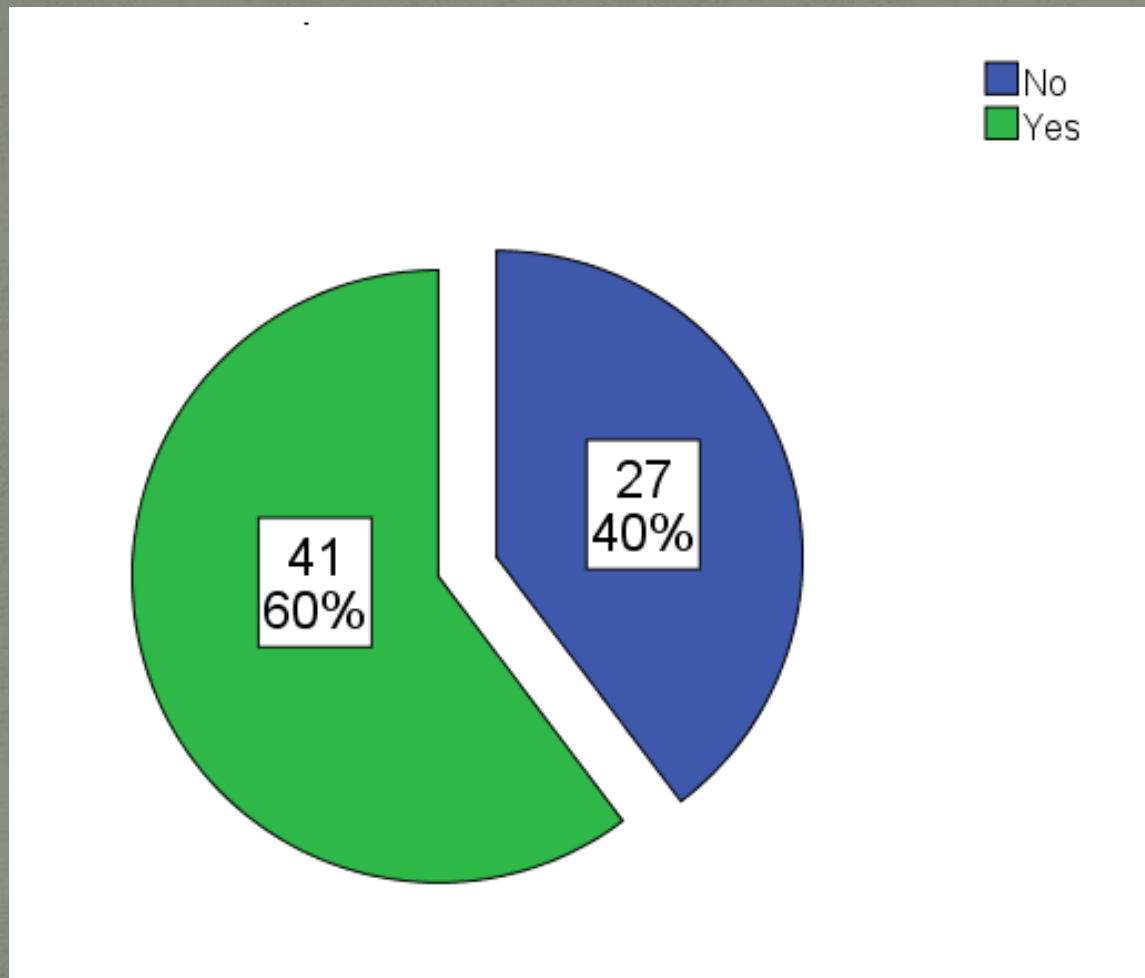
Demographics

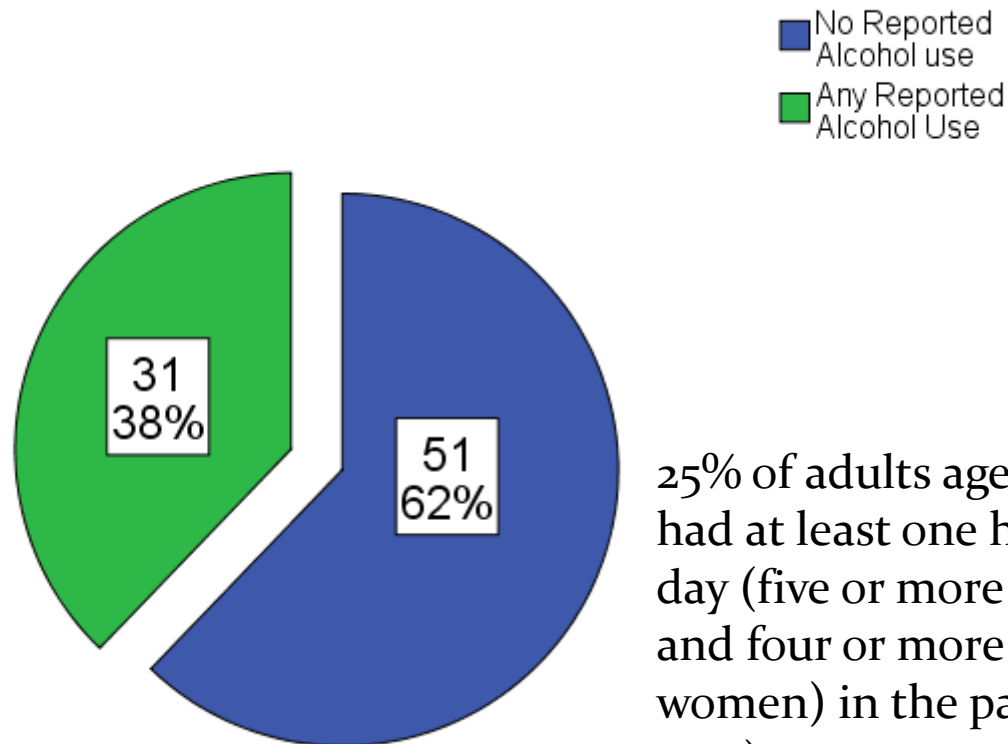## Age

- Mean Age:

50 years (SD 12.16)

- Age Range:

17-71 years

Gender
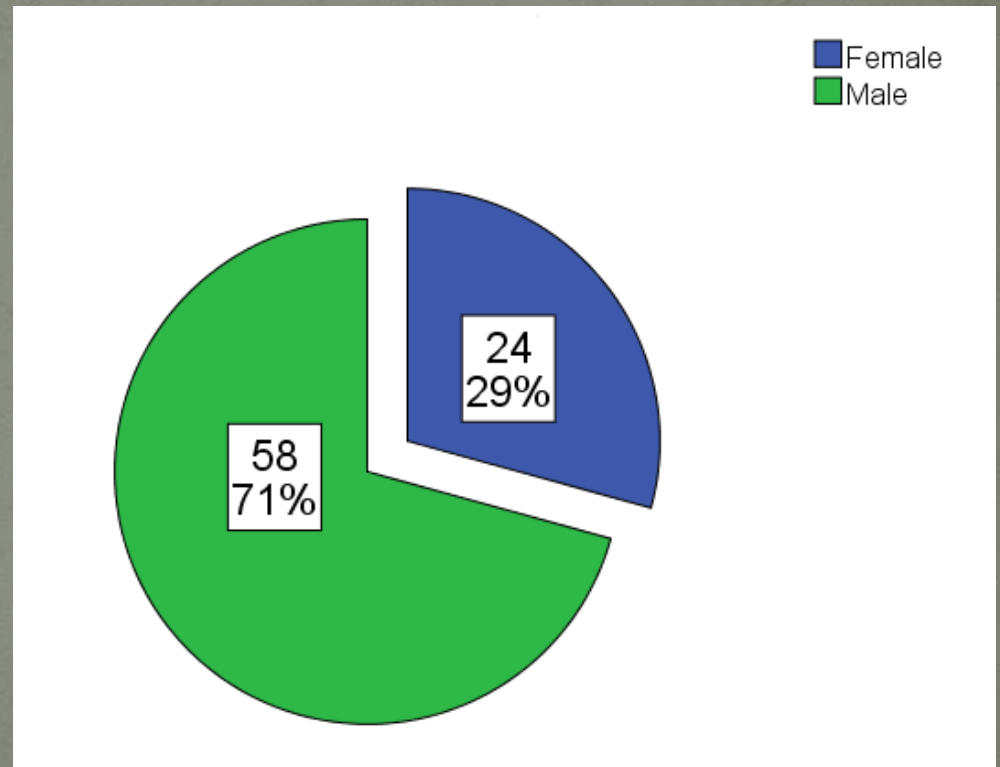
Insurance Coverage

Any Reported Alcohol Use

No Reported Alcohol use

Any Reported Alcohol Use

31
38%

51
62%

25% of adults aged 18 and over had at least one heavy drinking day (five or more drinks for men and four or more drinks for women) in the past year (CDC, 2017)

Any Reported Tobacco Use

Pie chart:
- No Tobacco Use Reported: 28, 34%
- Any Tobacco Use Reported: 54, 66%
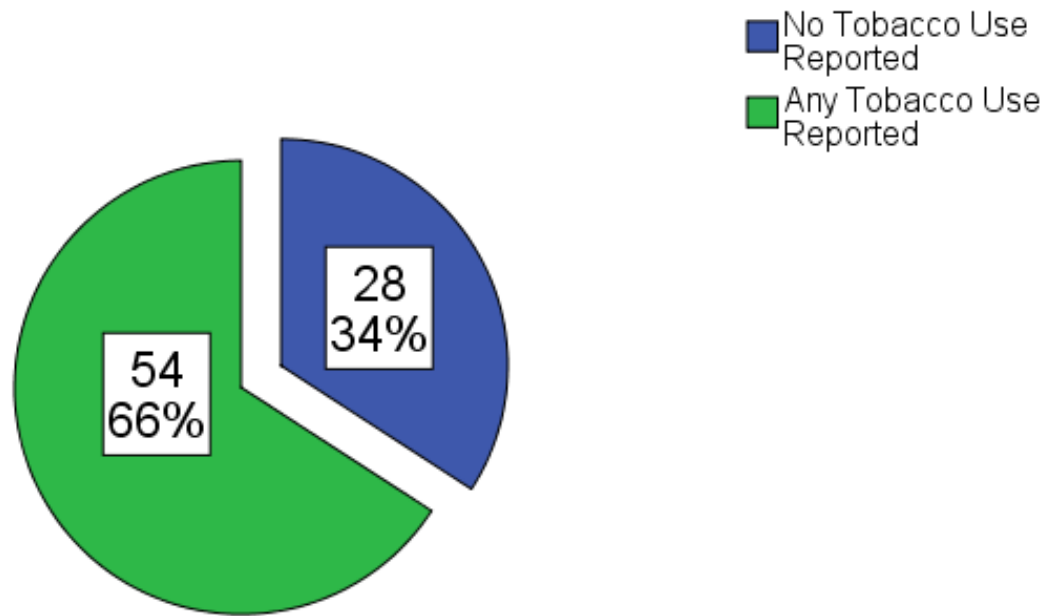
15.1% of all adults (36.5 million people) were current cigarette smokers in 2015 (CDC, 2017)

Top <u>Diagnoses</u> FHPC Outreach 2017

1. Psychiatric/Mental Health Diagnosis or Concern

2. Hypertension

3. Respiratory-related

4. Back pain

5. Diabetes

6. Unintentional Injuries

7. Skin-related complaints/diagnoses

8. Kidney/Urological

9. Dyslipidemias

10. Arthritis

11. Other

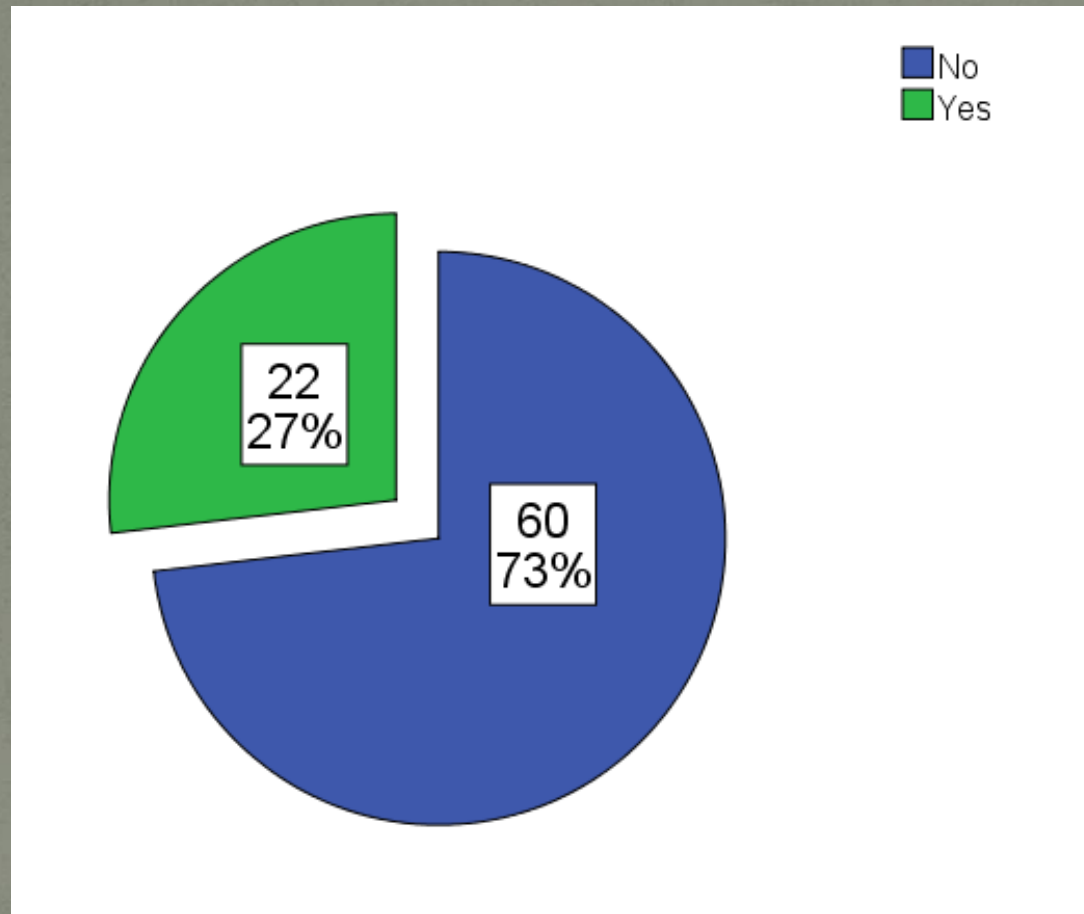# Any Psychiatric/Mental Health History/Diagnosis/Chief Complaint

Hypertension

Hx or Dx of HTN

No Hx/Dx of Hypertension
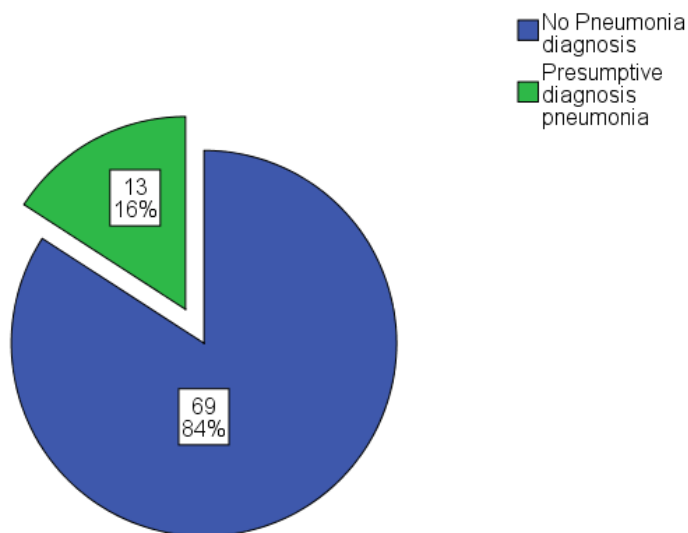Hx/Dx of HTN

32
39%

50
61%
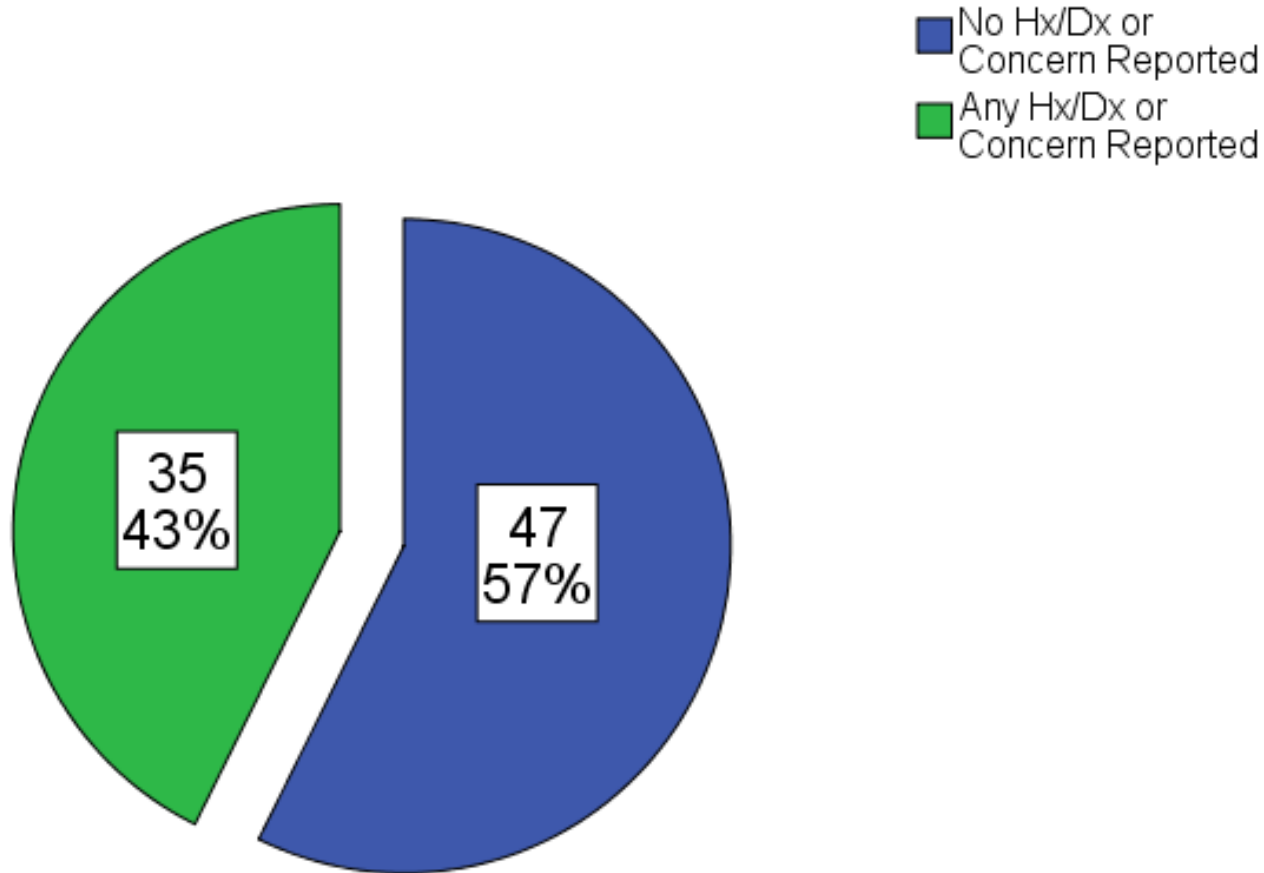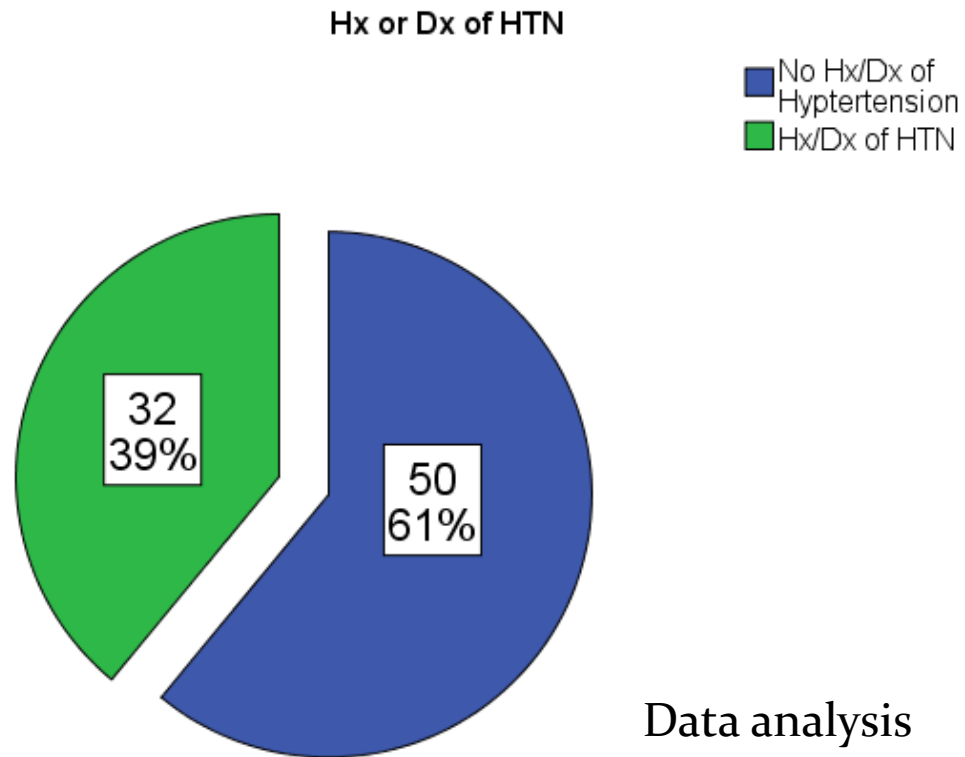
Data analysis prior to new Blood Pressure Guidelines

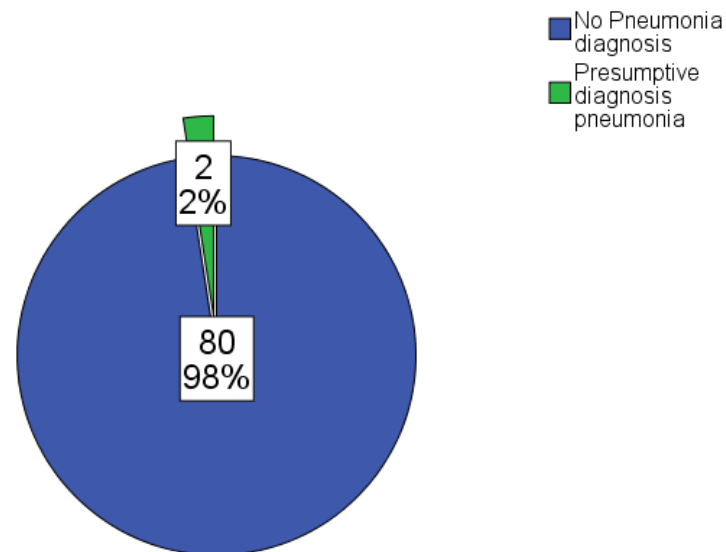# Chronic Lower Respiratory (i.e., Asthma, COPD, Chronic Bronchitis, Other)
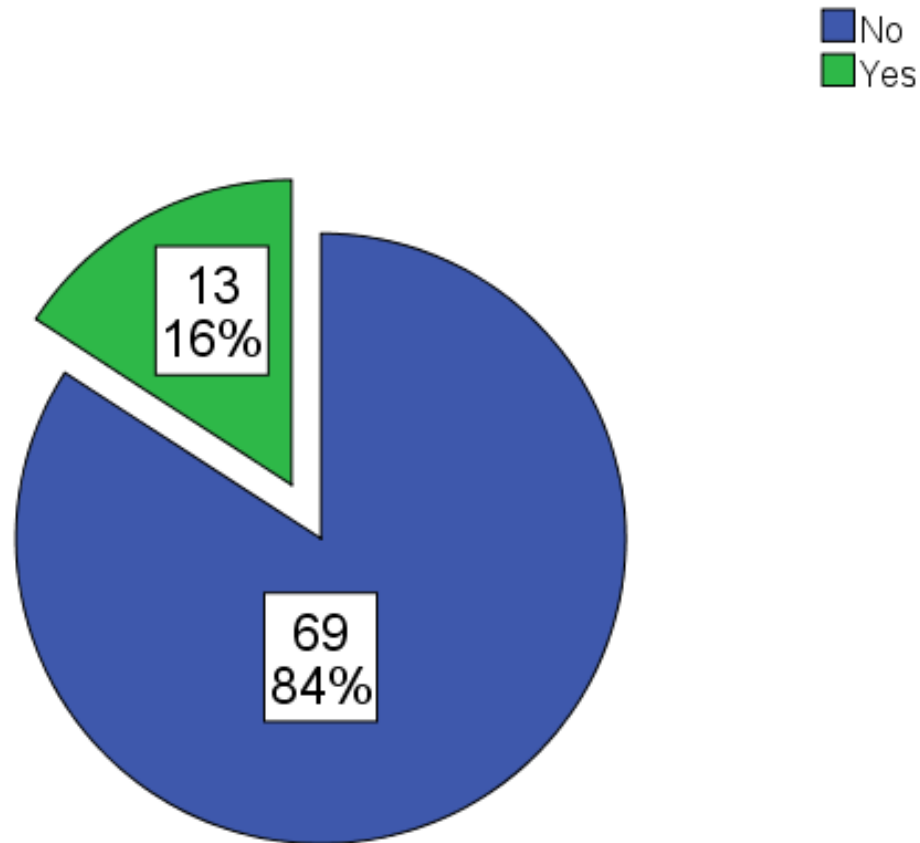
Pneumonia (suspected or confirmed)

Jan-Jun 2017

July-Sept 2017

# All Respiratory Complaints Not otherwise Specified

Respiratory Summary

- **47/275 visits or 17%** of all patient encounters were associated with one or more respiratory conditions

- Chi-square tests were performed to examine the relationship between Chronic Lower Respiratory Illness(CLRI), Pneumonia, and Respiratory Illness NoS (RNoS).

- Patients with a history of CLRI were **4.2 times more likely** to be diagnosed with pneumonia for the same time period than those that did not have a history of CLRI (X^2 (1, N =82) =5.74, p = .02)

- Patients with a history of CLRI were 1.2 times more likely to be diagnosed with RNoS, but this did not reach statistical significance (X^2 (1, N = 82) = 1.24, p= .33)

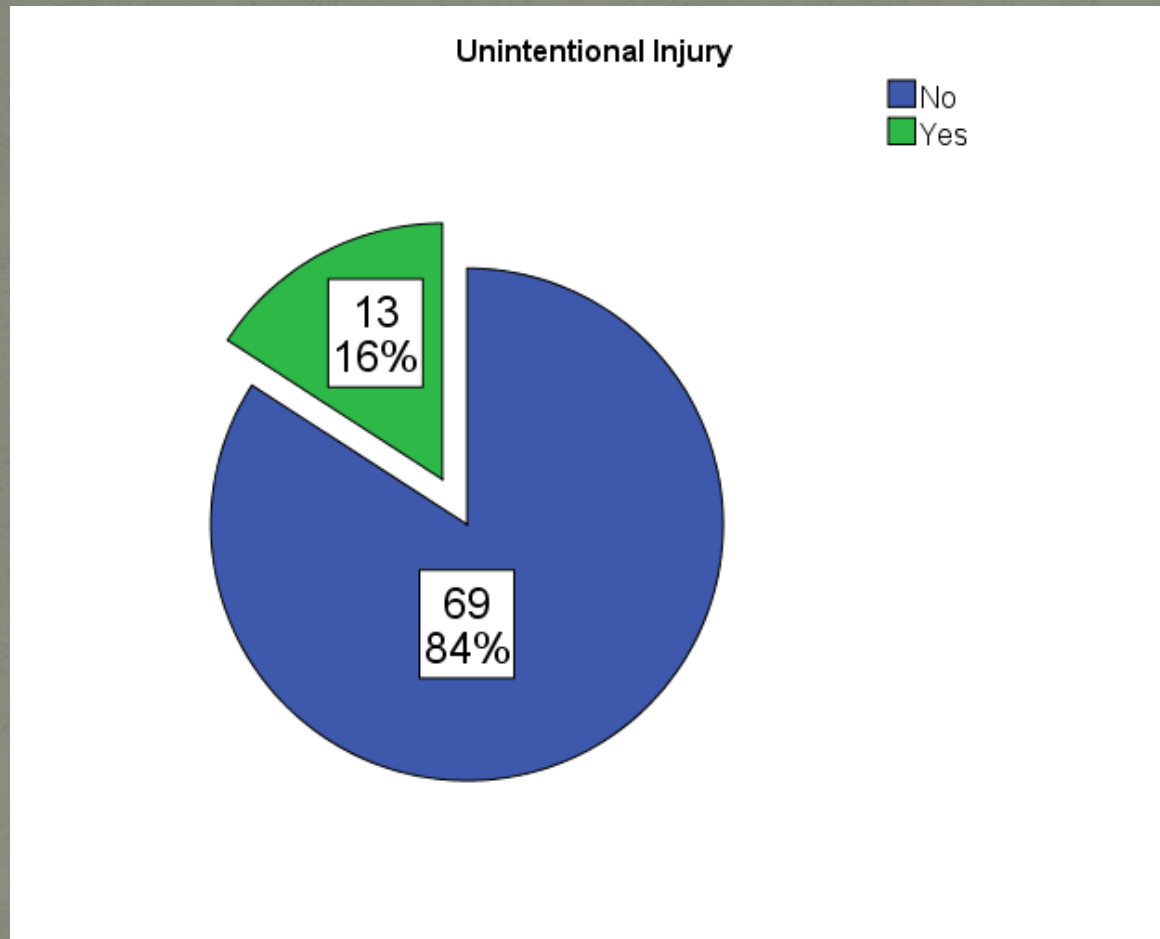# Back Pain
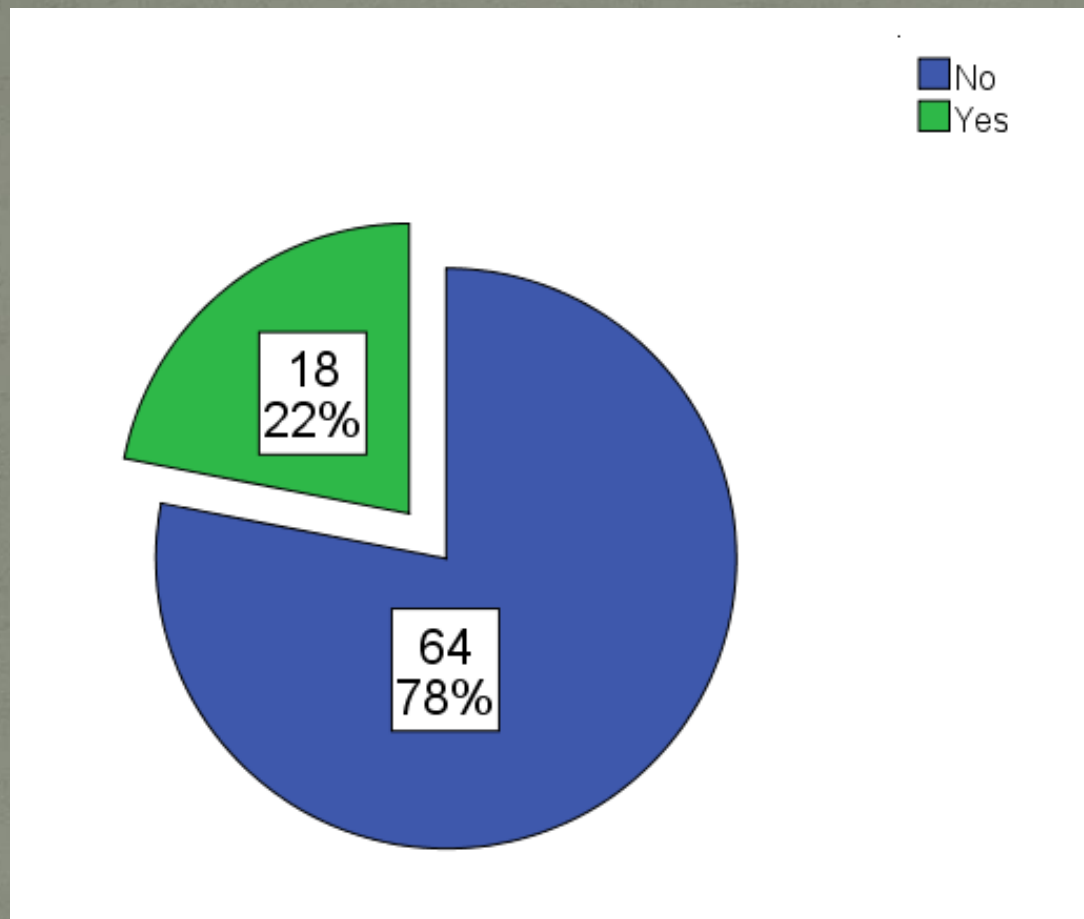
Diabetes
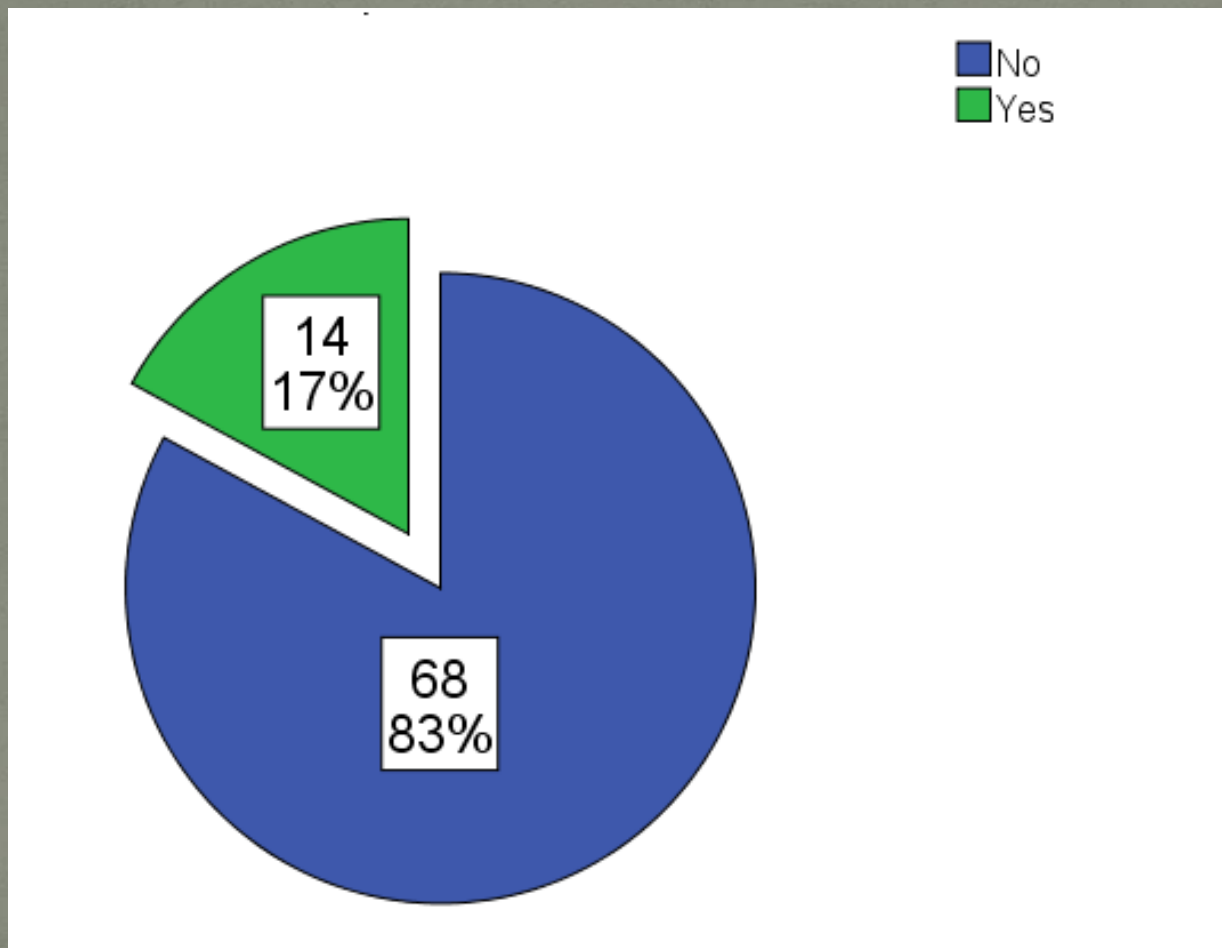
Unintentional Injury

Skin Complaints

Cases (individual patients) with skin complaints

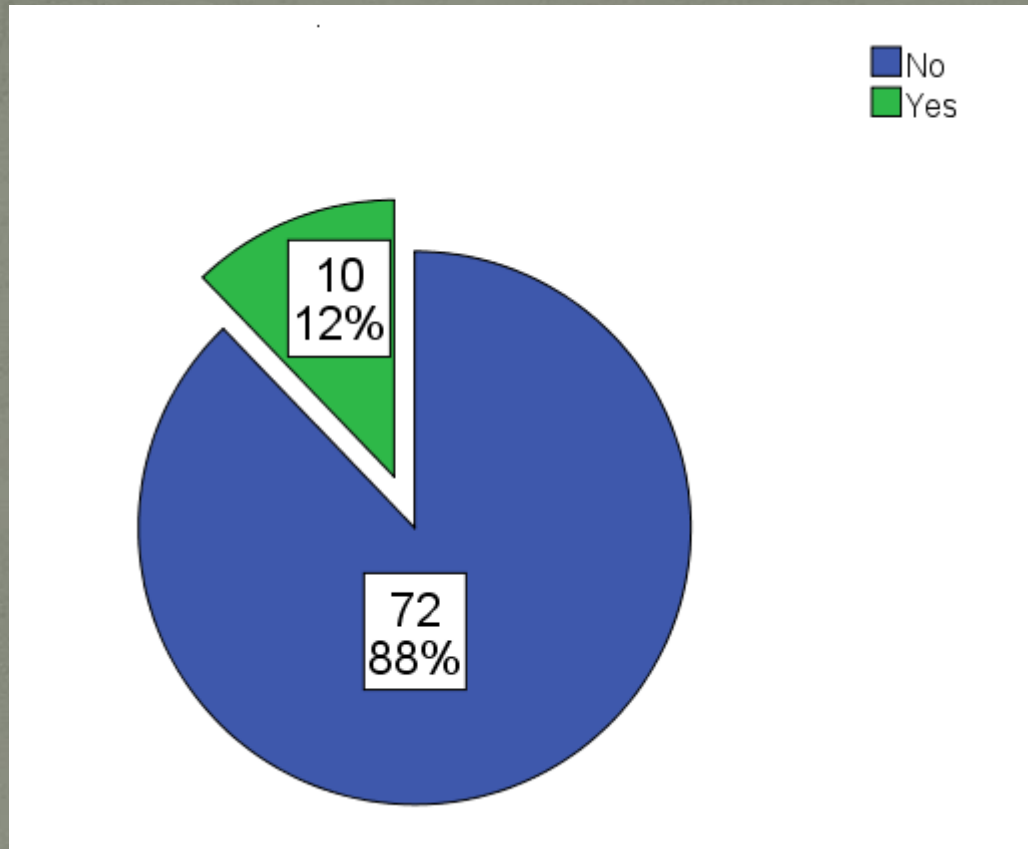■ No
■ Yes

12
15%

70
85%
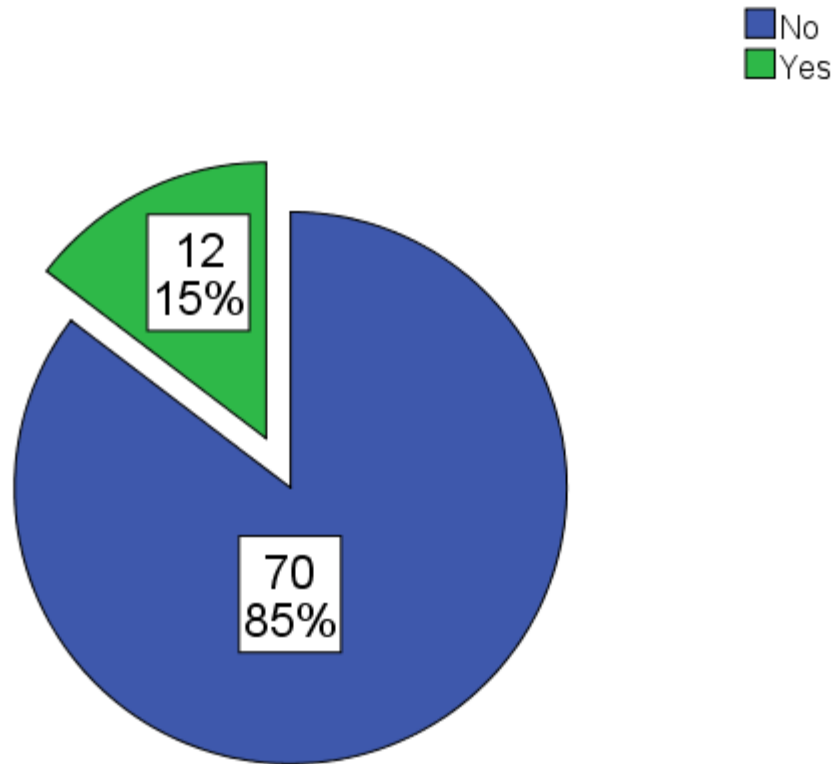
Kidney/Urological
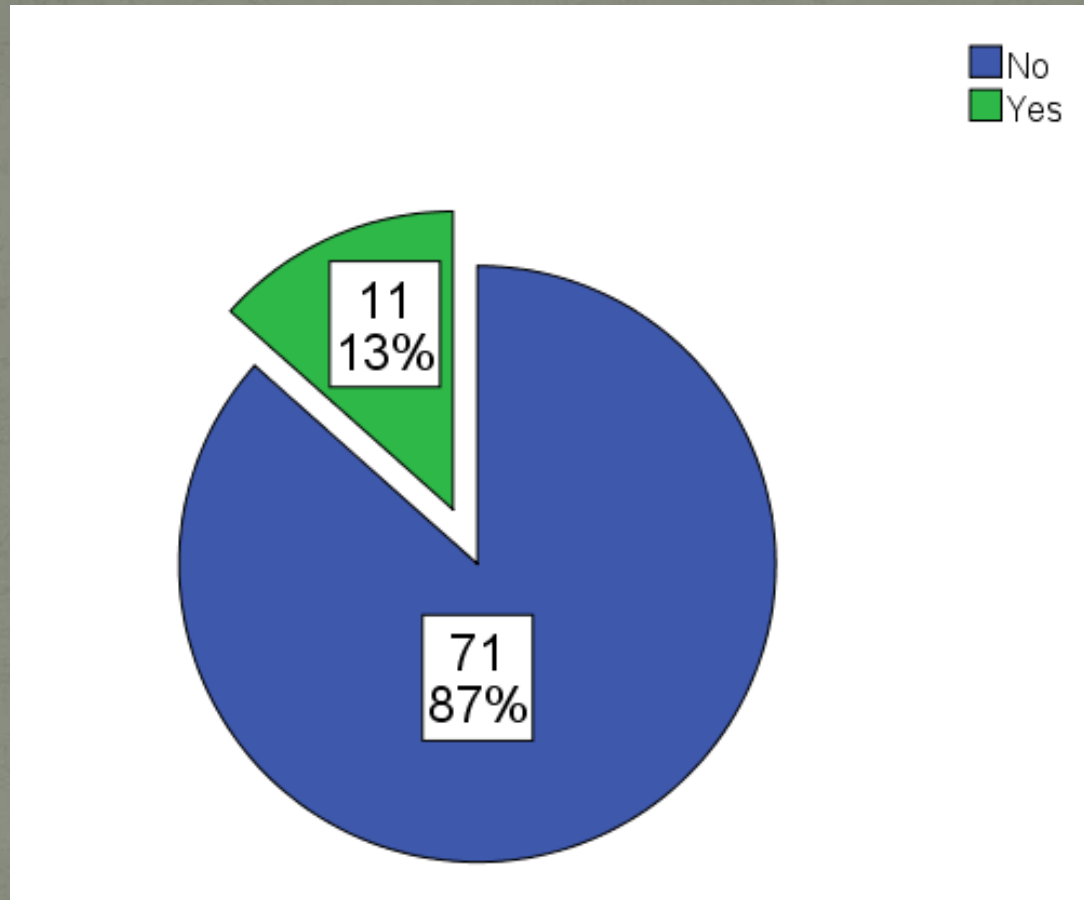
Dyslipidemia

Arthritis
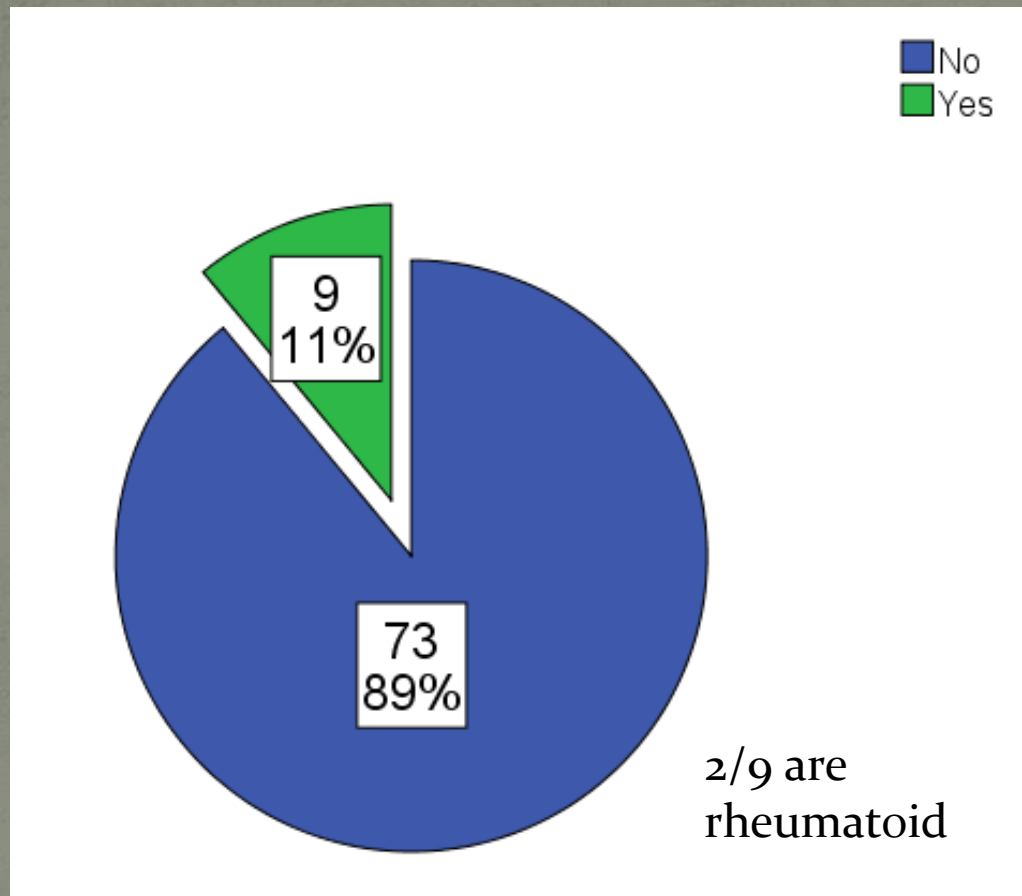
Other
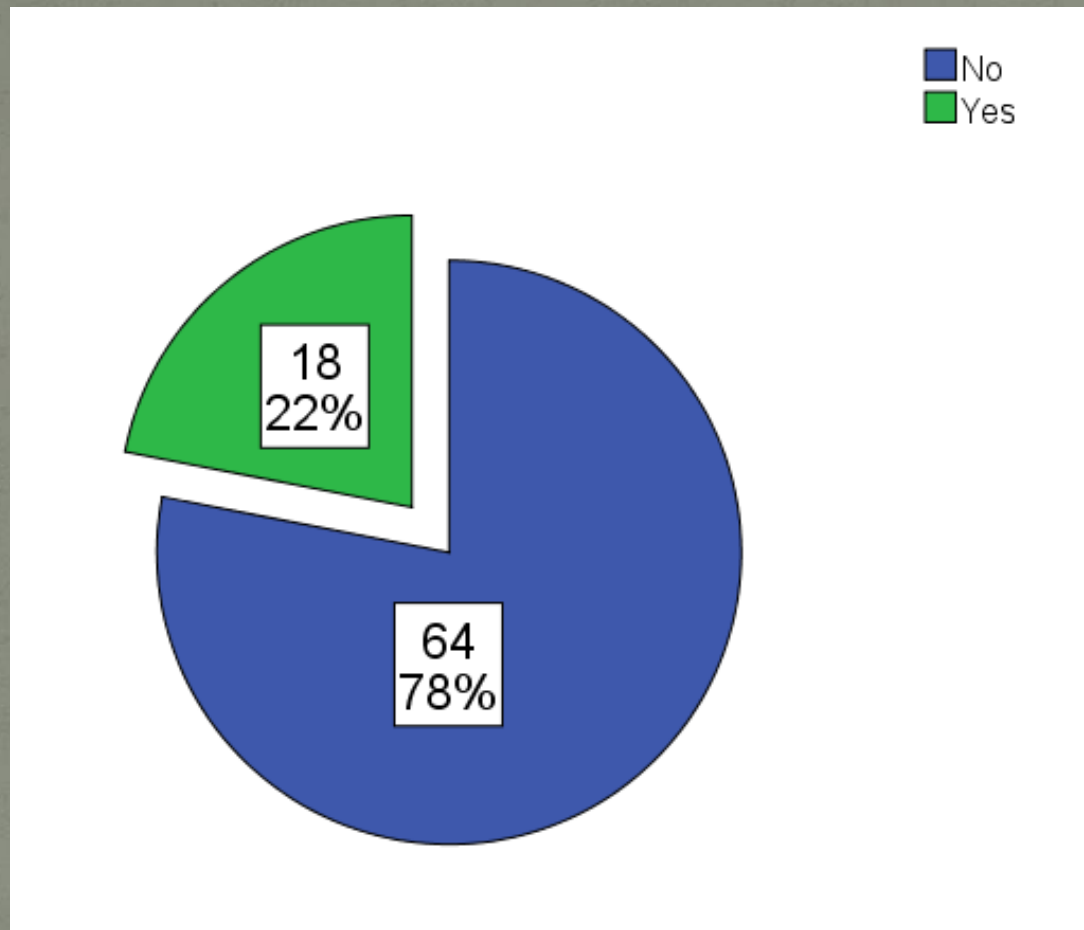
"Oh By the Way..."

Objective 6

- Review progress to date using measures of success:
  - Systolic and Diastolic BP (decrease) (<130/80)
  - HgA1C (decrease) (<9%, < 7%)
  - ED visits (decrease)
  - EMS calls (decrease)
  - Tobacco use (decrease)

Change in Systolic Blood Pressure

Differences

- 15 matched pairs
- Mean: 13 mm decrease Time 1 (140) to Time 2 (126)

- Median: 10 mm decrease Time 1 (132) to Time 2 (122)

Wilcoxon Matched Pairs

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Systolic BP Time 1 (Anytime) and Systolic BP Time 2 (Closest to end date) equals 0.	Related-Samples Wilcoxon Signed Rank Test	.023	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Change in Diastolic Blood Pressure

Differences

- 15 matched pairs
- Mean: 8 mm decrease Time 1 (83) to Time 2 (75)

- Median: 6 mm decrease Time (80) 1 to Time 2 (74)

Wilcoxon Matched Pairs

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of differences between Diastolic BP Time 1 and Diastolic BP Time 2 equals 0.	Related-Samples Wilcoxon Signed Rank Test	.030	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Change in HgbA1C : A case study

- **April 2017**: 51 y o female presents with request for thyroid (Synthroid) and diabetes medication (Metformin); PMH also signif. for HTN; FmHx sig for sudden cardiac death

- + Tobacco - ETOH

- RBS: 383, **HgbA1C 13.7%,** TSH 8.09 mIU/L; anion gap nml

- BP 112/70 ; ECG WNL

- Started on the Synthroid and Metformin at the appropriate dosages; later visit Glipizide and Lisinopril (elevated BP)

- Diabetic diet counseling; Stop smoking; referred to CM to find PCM for thyroid ultrasound (nodular thyroid)

- **July 2017: HgbA1c 7.9** and TSH was 3.12

- **October 2017: HgbA1c was 6.5**

- **November 2017: First PCM visit** "Everything was normal"

Emergency Department Referrals

Time 1

- 4 referrals Jan- Jun 2017
  - 1 Cardiovascular Event
  - 1 Respiratory Event
  - 2 Other

Time 2

- 3 referrals July-Sept 2017
  - 2 Cardiovascular Events
  - 1 Cerebrovascular Event

Emergency Medical Services Called

Time 1

- Jan-June 2017
  - 2 EMS calls
    - 1 Head Injury (with Loss of Consciousness)

    - 1 Respiratory (Respiratory Failure)

Time 2

- July – Sept 2017
  - 2 EMS calls
    - 1 Cardiovascular (A-fib with runs of V-tach)

    - 1 Neurological (Seizure)

Additional Measures of Success

Healthcare Provider-specific Indicators

- Proportion of HCPs that document that patients with asthma, depression, diabetes, hypertension, and and/or hyperlipidemia have received...education

- Proportion of HCPs who provide patients with written asthma or COPD management plans...

- √Proportion of HCPs who screen their patients for depression ...

- √Proportion of HCPs that document counseling or education related to diet...

- √Proportion of HCPs that instruct their patients to quit smoking

Nurse [and Allied Health] - specific Indicators

- Level of Satisfaction with care provided
  - According to one survey of PADs clients performed last summer, there was a high level of satisfaction with healthcare services offered

- √Number and types of educational programs offered

- √Referrals to primary and specialty care

- Educational Groups led (e.g., Diabetes, Tobacco Cessation)

Patient/client-specific Indicators

- √Proportion of persons who have a specific source of ongoing care (i.e. PCM)

- √Proportion of adults with hypertension whose blood pressure is under control (e.g., consistently <u><130/80)</u>

- √Proportion of persons with mental health disorders that receive treatment

- **Proportion of persons who smoke that quit smoking**

- **Proportion of homeless individuals that have access to screening and prevention services (i.e. vaccines) for emerging infectious diseases as identified by the CDC**

FHPC Outreach Volunteer

Questions?

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Back-Up slides

Some Background Information

Homelessness Defined

- There is more than one "official" definition of homelessness...

- And, there is more than one type of homelessness... Situational or Transitional, Episodic, or Chronic

The US Department of Health and Human Services defines Homelessness as:

- "an individual who lacks housing ...including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is a resident in transitional housing..."

Situational or Transitional Homelessness

- Individuals forced into their situation because of uncontrollable circumstances; circumstances may include:

    - sudden unemployment
    - sudden loss of breadwinner
    - significant loss of material possessions due to variable reasons
    - natural calamities

Episodic Homelessness

- People in this category:
  - Intermittently fall in and out of homelessness
  - May have recurring mental health issues and/or
  - Substance abuse problems

Chronic Homelessness

- "A Chronically Homeless Individual refers to an individual with a disability who has been continuously homeless for 1 year or more or has experienced at least four episodes of homelessness in the last 3 years where the combined length of time homeless in those occasions is at least 12 months" (AHAR, 2016)

Cook County Top 10

1. Heart Disease

2. Cancer

3. Stroke

4. Chronic lower respiratory disease (COPD)

5. Pneumonia & influenza

6. Diabetes

7. Alzheimer's Disease

8. Kidney Disease

9. Accidents (unintentional injuries)

10. Septicemia

(Please Don't forget Companion Animals!)